REMARKS

This application has been reviewed in light of the Final Office Action mailed November 22, 2006. Claims 1-28 are pending in this application. Claims 1-7, 13-16, 20-23 stand rejected. Claims 8-12, 17-19, 24-28 stand objected to as being dependent upon a rejected base claim, but would be allowable subject to rewriting and proper dependence.

I. REJECTION OF CLAIMS UNDER 35 U.S.C. § 112

Claims 1-28 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Regarding claims 1, 13 and 20, the amended limitation recites, "wherein said producing, tessellating and detecting occur in a chronological order". Support for this amended limitation can be found on page 6, lines 2- 7 of paragraph 25, Figure 4 and on page 7, lines 6-8 of paragraph 30 and Figure 6. Thus, the applicant request withdrawal of this 112 rejection.

II. REJECTION OF CLAIMS UNDER 35 U.S.C. § 102

The Examiner has rejected claims 1-5, 7, 13,14, 16, 20-23 under U.S.C. § 102(b) as being anticipated by Franke et al., Autonomous Driving Goes Downtown, IEEE Intelligent Systems, 1998 (hereinafter "Franke"). Applicants traverse this rejection.

Specifically, on page 3 and 4 of the office action, Examiner refers to page 41, column 2 (**i.e. stereo-based obstacle detection and tracking**) of Franke as reciting "Obviously this classification scheme cannot guarantee uniqueness of the ..... which is bases for all subsequent steps". The Examiner further refers to page 42, column 2; and page 44, column 2 (**i.e. object recognition**) of Franke as reciting "Overall, it follows the same steps as arrow detection-that is, color segmentation, filtering, and classification.......using a polynomial classifier.". As per the

Examiner, these recitations of Franke teach the limitation of the producing, tessellating and detecting occur in chronological order as recited in previously presented independent claims 1, 13 and 20. Contrary to the Examiner's assertion, the recitations of Franke as mentioned above fail to teach this limitation as discussed below.

Franke's system is divided into two different applications. First is the **stereo-based obstacle detection and tracking** and second is the **object recognition.** Referring to page 40, column 2, Franke recites its system as "…..It includes stereo vision for depth-based obstacle detection and tracking and a framework for monocular detection and recognition of relevant objects…….". This clearly indicates that the **object recognition** of Franke does not utilize the stereo depth map of **obstacle detection** since it is monocular. Thus, the steps of **object recognition** do not occur subsequent to the disparity image created for **obstacle detection and tracking** . Whereas, in the present invention, the depth map is first produced, which is tessellated into a plurality of patches and then further, the tessellated depth map is used to detect a potential threat.

Furthermore, as discussed in the previous amendment and response dated September 7, 2006, Franke shows a the 2D depth map as a cluster of feature points, which are detected as potential obstacles, that are subsequently tracked. See page 41, column 3, last three lines, page 42, column 1, and Fig. 4 of Franke. So, in Franke, creating the cluster of points is occurring simultaneously with detecting potential obstacles. This is because the cluster of feature points in Fig. 4 are represented as the detected potential obstacles. Whereas, in the present invention, the depth map is first tessellated into a number of patches which are then selected for processing to detect a potential threat in the tessellated depth map.

Since Franke is devoid of any teachings regarding producing step, tessellating step and detecting step occur in a chronological order, the Applicants believe amended independent claims 1, 13, and 20 are patentable under 35 U.S.C. § 102 (b). Claims 2-5, 7, 14, 16, 21-23 depend, either directly or indirectly, from claims 1, 13, and 20 and are patentable at least for the same reasons that the independent claims are patentable. As such, the Applicants respectfully request the rejection of claims 1-5, 7, 13, 14, and 16, 20-23 be withdrawn.

III. REJECTION OF CLAIMS UNDER 35 U.S.C. § 103

The Examiner has rejected claims 6 and 15 as being unpatentable over Franke in view of Yang et al., Vision Based Real-time Obstacles Detection and Tracking for Autonomous Vehicle Guidance. Real-time Imaging VI, Proceedings of SPIE, Vol. 4666, pp. 65-74, 2002 (hereinafter "Yang").

Neither of the references, Franke in view of Yang alone or in combination teach or suggest the feature of producing step, tessellating step and detecting step occur in a chronological order as recited in amended independent claims 1 and 13. Since, the amended independent claims 1 and 13 are patentable over the prior art, as discussed above, Applicant submits that the dependent claims 6 and 15 are allowable for the same reasons as advanced allowability of claims 1 and 13. Applicant respectfully requests withdrawal of the §103 rejection of Claims 6 and 15.
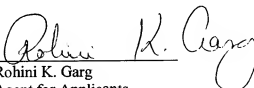
CONCLUSION

In view of the above amendment and remarks, Claims 1-28 are submitted to be allowable. Reconsideration and favorable action in this regard are therefore earnestly solicited.

No fee is believed to be required with the entry of this amendment. However, if any additional fee is deemed necessary for this Amendment to be entered and considered by the Examiner, then the Commissioner is authorized to charge such fee to Deposit Account No. **501358**.

Applicants' undersigned agent may be reached by telephone at (973) 597-6174. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

Rohini K. Garg
Agent for Applicants
Reg. No. 45,272

LOWENSTEIN SANDLER PC
65 Livingston Avenue
Roseland, NJ 07068
Tel.: 973-597-2500